

## CLAIMS

1. A multicarrier transmission apparatus comprising:
  - an instruction section that, when a communicating party station receives a signal from a remote station on a carrier frequency, said carrier frequency being used for transmission to said communicating party station, issues an instruction to stop transmission by said carrier frequency and signals within a predetermined bandwidth of said carrier frequency; and
  - a transmission section that transmits a signal using a plurality of different carrier frequencies and stops signal transmission according to the instruction from said instruction section.
2. The multicarrier transmission apparatus according to claim 1, wherein said instruction section includes:
  - a first control section that controls signal transmission corresponding to the carrier frequency for communication with the communicating party station;
  - a second control section that controls signal transmission corresponding to another carrier frequency within a predetermined bandwidth of the carrier frequency; and
  - a third control section that issues the instruction to stop the signal transmission at a same timing as a signal transmission timing controlled by said first control section and a signal transmission timing controlled by said second control section.

3. The multicarrier transmission apparatus according to  
claim 1, wherein said instruction section includes:

a first control section that controls signal  
5 transmission corresponding to the carrier frequency for  
communication with the communicating party station;

a second control section that controls signal  
transmission corresponding to another carrier frequency within  
a predetermined bandwidth of said carrier frequency; and

10 a third control section that instructs said first control  
section to stop transmission and thereafter instructs said  
second control section to stop transmission, and, after a  
predetermined period of time passes, instructs said first  
control section to restart the transmission and thereafter  
15 instructs said second control section to restart the  
transmission.

4. The multicarrier transmission apparatus according to  
claim 1, wherein said instruction section includes:

20 a first control section that controls signal  
transmission corresponding to the carrier frequency for  
communication with the communicating party station;

a second control section that controls signal  
transmission corresponding to another carrier frequency within  
25 a predetermined bandwidth of said carrier frequency; and

a third control section that instructs said first control

section to stop transmission and thereafter instructs said second control section to stop transmission, and, after a predetermined period of time passes, instructs said second control section to restart the transmission and thereafter 5 instructs said first control section to restart the transmission.

5. A base station apparatus having the multicarrier transmission apparatus of claim 1.

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6. A mobile communication system comprising:  
a base station apparatus having the multicarrier transmission apparatus of claim 1; and  
a mobile station apparatus that, when a carrier 15 corresponding to a communicating base station apparatus is not in operation, receives a carrier corresponding to a different base station apparatus from said communicating base station apparatus.

20 7. A multicarrier transmission method comprising the steps of:

when a communicating party station receives a signal from a remote station on a carrier frequency, said carrier frequency being used for transmission to said communicating 25 party station, issuing an instruction to stop transmission by said carrier frequency and signals within a predetermined

bandwidth of said carrier frequency; and  
transmitting a signal using a plurality of different  
carrier frequencies and stopping signal transmission according  
to the instruction.